



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,056	10/28/2003	Kazuhiko Yanagawa	HITA.0450	3823
38327	7590	12/29/2005	EXAMINER	
REED SMITH LLP 3110 FAIRVIEW PARK DRIVE, SUITE 1400 FALLS CHURCH, VA 22042			TON, MINH TOAN T	
			ART UNIT	PAPER NUMBER
			2871	

DATE MAILED: 12/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/694,056		YANAGAWA ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Toan Ton		2871	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11/18/05.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 15-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. 09/948,578.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

***Election/Restriction***

1. An election without traverse of species (A) corresponding to claims 1-14 is acknowledged. Thus, claims 15-34 are hereby withdrawn from consideration.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakanowatari (US 4820025).

Nakanowatari discloses a liquid crystal display (LCD) device comprising: a pair of substrates (1, 2) disposed in opposition to each other with a liquid crystal (4) interposed there between; a sealing material (3) which secures one of the substrates to the other and seals the liquid crystal; and an organic material layer (13) formed in at least an area surrounded by the sealing material on the one of the substrates, a non-formation region of the organic material layer (i.e., regions of no organic material are present, see at least Figures 1-4) being provided in the vicinity of the sealing material on a side opposite to a side where the sealant is provided.

*Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-7 and 9-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakanowatari as applied to claims 1 and 8 above.

An active matrix LCD device comprising a plurality of pixels each having a switching element (e.g., TFT), wherein the TFT-LCD device commonly comprises gate lines, data lines, a gate electrode, a source electrode, a drain electrode, a pixel electrode connecting to the drain electrode through a protective/organic/leveling insulating layer. It is common and known in the art that the use of an active matrix (employing TFTs as switching elements) for achieving advantages such as cross-talk reduction. Thus, it would have been at least obvious to one of ordinary skill in the art at the time the invention was made to employ the concepts of an active matrix LCD device, as common and known in the art, and for also achieving advantages such as cross-talk reduction.

Nakanowatari discloses the non-formation region being a region between the sealing material and the electrode.

Nakanowatari discloses the sealing material having a rectangular pattern and the non-formation region (i.e., regions of no organic material are present, see at least Figures 1-4) of the organic material layer provided at least one corner of the sealing material.

Art Unit: 2871

The use of a black matrix layer is common and known in the art for achieving advantages such as high contrast. Therefore, it would have been at least obvious to one of ordinary skill in the art at the time the invention was made to employ a black matrix layer, as common and known in the art, and for also achieving advantages such as high contrast. Further, it is known in the art and a common goal in the art to minimize components/cost, thus resulting in advantages such as thinner/lighter-weight display, which is accomplished by eliminating extra layers (e.g., integrate layers). Forming the organic layer performing the insulating and light-blocking functions of one layer. Therefore, it would have been obvious to one having ordinary skill in the art to organic layer comprising a black matrix layer for achieving advantages such as high contrast and cost-reduction.

The use of a color filter layer is common and known in the art for achieving advantages such as a color display device. Further, it is noted the organic layer being a black matrix layer, a color filter, a leveling film (covering the black matrix layer and the color filter layer) are at least obvious variations (i.e., not patentably distinct) to each other.

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


### ***Contact Information***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan Ton whose telephone number is (571) 272-2303.

Art Unit: 2871

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

December 23, 2003

  
TOANTON  
PRIMARY EXAMINER